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Environmental Impact Assessments: Congressional Intent Versus Application

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ABSTRACT

Your director decided to build that new production plant the lab boys were advertising as the wave of the future. State-of-the-art technology, automated manufacturing, energy efficient. The facility has clean waste streams and meets safety guidelines.

All you have to do is build it. The site is somewhat remote and undeveloped; the government has owned it for years. You have the support of local politicians and labor unions.

Now for the press conference! Yes sir, the plant is safe; it was designed by our own engineers in the lab. Yes, we plan to hire locally. Yes, once operating, I expect the plant to employ up to 1,000 people. Yes, I expect the project will bring \$10 million to the local economy. Excuse me, I missed your point. What was that? Did I consider the impact of the plant on the local water system? What other alternatives? What do you mean what other sites were considered?

It is clear that your predecessors did not conduct an environmental impact assessment for this major Federal action.

They should have known. You should know. The law has been on the books for over 20 years. But most managers forget their responsibility to consider the environmental impacts of proposed actions.

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**ENVIRONMENTAL IMPACT
ASSESSMENTS:
CONGRESSIONAL INTENT VERSUS
APPLICATION**

"The Armed Services today have to be versed not alone in war but in government, politics, the humanities-economics, social and spiritual."

--Bernard Baruch

INTRODUCTION

In 1969, Congress passed the National Environmental Policy Act (NEPA). The law directs Federal agencies to establish a deliberate process to consider the environmental effects of proposed Federal actions. The law also allows the public to play as partners, early and throughout the decisionmaking process, in determining the best decision that balances environmental considerations.

So, what does this have to do with defense? The 1990s will require the government to consolidate defense facilities. There will be base closures, realignments of operations, and development of new technologies in new locations. Each major action will have some impact on the environment. And the public will be a key player in the process. Future managers can play ball by the rules and succeed or they can follow their own agenda with the probability of litigation and costly delay. Managing those actions responsibly --up front-- will be the measure of success for future managers.

Why did the Congress pass this law in the first place? A search of the legislative history provides the baseline for evaluating intent. Has the government achieved their desired goal? The literature is sparse on the success of this effort. My original assumptions for this paper was that NEPA was neither cost effective nor timely, and did not improve the decision process. To find out how the government has done, I met with eight people who

work with NEPA every day. Their observations and my findings show we have come a long way in making NEPA an integral part of the decision process; but we still have some ways to go to make NEPA work as the Congress intended.

WAS THE ENVIRONMENT A MAJOR CONCERN IN THE PAST?

Few will argue that defense facilities do not have a major impact on the environment, whether from the site itself or from operations conducted there. Most Department of Defense installations were in place in the past century. But the facilities of the Department of Energy's (DOE) nuclear weapons complex are an outgrowth of World War II. A look at the criteria for site selection gives a clear view of the concerns of senior managers in the past.

The first phase is commonly known as the Manhattan Project. Early in 1942, the site engineers had little idea of the specific production processes to support, but they knew large amounts of water and electrical power¹ would support virtually any production process. In addition, large, isolated land areas were necessary for security, secrecy, and safety of the public from these untested technologies.

After World War II, Congress wrestled with the emerging technology promise of atomic energy. In 1946, they passed the Atomic Energy Act. The Act directed civilian leadership, through an Atomic Energy Commission, and operation of research, development, and production facilities for military and civilian uses of atomic energy.² Early on in the post-war period, technology developments dictated even larger land areas to protect the public from a

¹ History Associates, Inc., History of the Production Complex: The Methods of Site Selection, Executive Summary.

² Atomic Energy Act of 1946, as amended.

potential accident. And now, there were new security concerns over the range of Soviet air power coming over the Arctic and the vulnerability of facilities to attack. A new policy of "security through dispersion" required new sites, vice additions to existing sites, outside the range of Soviet bombers.³

With the Soviet development of the atomic bomb, more production facilities were necessary to meet the needs of the Defense Department for more nuclear warheads. The Cold War was underway. Sites in the West and northern tier of states were now vulnerable, so the site selection process focused on the South and Ohio River regions⁴ for the location of additional facilities.

The nuclear weapons complex ultimately operated facilities in thirteen states to meet the demand for nuclear warheads. The production process, however, generated a variety of regrettable environmental consequences, including contamination of soil, water, and air, and release of hazardous chemicals and radionuclides.⁵ It is clear that there were no legal requirements for consideration of environmental consequences. In fact, the word *environment* is rarely mentioned in the site selection criteria. No one really understood those environmental impacts, whether they worked in government or industry. Meeting the Soviet threat was the top priority.

WHAT WAS THE CONGRESSIONAL INTENT OF NEPA?

In the late 1950s, people began questioning the impact of government and industry on the quality of the environment. But, there was a Cold War going

³ History Associates, Inc., Executive Summary.

⁴ Ibid.

⁵ U.S. Congress, Office of Technology Assessment, Complex Cleanup: The Environmental Legacy of Nuclear Weapons Production, page 23.

on; industry had to produce to meet the growing demand for defense needs as well as consumer goods. In the 1960s, Rachel Carson's Silent Spring focused our conscience on what humans had done to the environment.

Congress became concerned that many decisions had adverse impacts on the environment. They introduced legislation to fix specific environmental problems. The Clean Air Act of 1963 was only the beginning. NEPA was only the third major piece of environmental law. Within 10 years, there would be 8 environmental laws; within 20 years there would be 20 separate laws with major environmental responsibilities for Federal agencies. See Attachment 1.

Hearings

As early as 1959, Congress sought to establish a more efficient way to coordinate Federal environment and conservation activities. By 1965, momentum was building and several Senators and Representatives introduced bills and held hearings.⁶ In July 1968, a joint House-Senate conference discussed where the Congress should go on the variety of environmental concerns before them. This conference generated a flood of legislation. Then, in February, 1969, Representative John Dingell (D-MI) introduced H.R.6750 (later to be consolidated into H.R.12549) and Senator Henry Jackson (D-WA) introduced S.1075, the National Environmental Policy Act of 1969.

The Senate held hearings on its bill in April; the House held hearings in May. The Senate reported S.1075 in July and the House reported H.R.12549 in September. In October, conferees were chosen and met in conference.

⁶ Lyndon B. Johnson School of Public Affairs, Environmental Impact Statements: Effects on Program Implementation, pages 5-8.

Committee Reports

Each body published a report of its proceedings. This research paper focuses on the Senate Committee Report for S.1075, since that bill was close to the actual statute. The introduction section states the importance of the bill. "It is the unanimous view of the members of the Interior and Insular Affairs Committee that our Nation's present state of knowledge, our established policies, and our existing governmental institutions are not adequate to deal with the growing environmental problems and crises the Nation faces."⁷

The Committee then iterated a depressing list of our environmental problems. A telling root cause of the problems is found in the statement:

"Traditional policies were primarily designed to enhance the production of goods and to increase the gross national product. As a nation, we have been very successful at these endeavors. But, as a nation, we have paid a price for our material well-being. That price may be seen today in the declining quality of the American environment."⁸

-- Committee on Interior and Insular Affairs, 1969

The Committee called for new means and procedures to preserve environmental values in the public interest.⁹ While focused on the environment, they believed that the nation was suffering from a more fundamental problem. "As a result of this failure to formulate a comprehensive national policy, environmental decision making largely continues to proceed as it has in the past. Policy is established by default and inaction. Environmental problems

⁷ U.S. Congress, National Environmental Policy Act of 1969: Report to Accompany S.1075, page 4.

⁸ Ibid., page 5.

⁹ Ibid.

are only dealt with when they reach crisis proportions. Public desires and aspirations are seldom consulted."¹⁰

The Committee felt that it was the Congress's responsibility to clarify "...the goals, concepts and procedures which determine and guide the programs and the activities..."¹¹ for Federal agencies in environmental matters. The Committee established a process which directed that any proposed major Federal action, such as projects, legislation, regulations, and changes in ongoing programs, must include a determination whether that action would have a significant effect on the quality of the human environment.¹²

"Congress, however, never intended in enacting NEPA that national environmental policy should override other policies. Instead, an accommodation --a balancing of competing policies-- is the goal that Congress sought."¹³

In December, Congress passed a compromise bill and sent it to the President.

The Statute

President Richard M. Nixon signed the bill into law on January 1, 1970. The National Environmental Policy Act of 1969 (Public Law 91-190) is a short and simple piece of legislation. Section 2 states the purpose of the Act.

"...To declare a national policy which will encourage productive and enjoyable harmony between man and his environment; to promote efforts

¹⁰ Ibid.

¹¹ Ibid., page 6.

¹² Ibid.

¹³ Council on Environmental Quality, Environmental Quality, page 191.

which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man; to enrich the understanding of the ecological systems and natural resources important to the Nation; and to establish the Council on Environmental Quality."¹⁴

Title I. Title I establishes Congressional declaration of national environmental policy. There are five sections. Section 101 sets broad policies and goals, as well as the responsibility for the Federal government to improve environmental considerations. Sections 103, 104, and 105 address various administrative matters associated with potential conflicts with other laws. Section 102 is the heart of NEPA.

Section 102. Part A requires Federal agencies to use a "systematic, interdisciplinary approach which will insure the integrated use of the natural and social sciences and the environmental design arts in planning and decisionmaking which may have an impact on man's environment."¹⁵ Part B requires agencies to establish methods and procedures to assure environmental values are given appropriate consideration in decisionmaking.

Part C requires the preparation of an environmental impact statement whenever a proposed Federal action significantly affects the environment. There are five criteria that must be included in each statement. "1) the environmental impact of the proposed action; 2) any adverse environmental effects which cannot be avoided should the proposal be implemented; 3) alternatives to the proposed action; 4) the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and

¹⁴ The National Environmental Policy Act of 1969, Public Law 91-190.

¹⁵ Ibid.

5) any irreversible and irretrievable commitments of resources which would be involved in the proposed actions should it be implemented."¹⁶

The remaining parts of Section 102 direct various studies, analyses, and information sharing with domestic and international bodies, each promoting the consideration of the environment in the decision process.

Title II. This title establishes the Council on Environmental Quality to carry out the provisions of the Act. There are nine sections. The Council must prepare an annual report to the Congress on: 1) the status and condition of the environment, 2) trends affecting the environment, and, 3) the adequacy of natural resources in meeting needs. A fourth major requirement for the Council is to assess Federal, State, and local government, and other activities that affect the environment, and to recommend remedial measures if necessary. Other sections provide a variety of administrative authorities.

The Implementing Regulations

The law directs the Council on Environmental Quality to establish implementing guidelines. Over time, regulations replaced the guidelines, but by any measure, these requirements have been a relatively stable part of the NEPA process. They are surprisingly short¹⁷ but still cover the waterfront of procedural requirements. They include statements of purpose, policy, and mandates; the role of NEPA in agency planning; requirements for environmental impact statements; commenting periods; procedures for unsatisfactory actions; agency decisionmaking procedures; and other administrative requirements for

¹⁶ Ibid.

¹⁷ 40 CFR Parts 1500-1508.

NEPA actions. Generally, though, they leave much discretion and flexibility to the agencies in preparing statements appropriate to their own needs.

The regulations suggest a tiering¹⁸ of documents --ranging from broad coverage of general programs down through specific actions-- to address environmental impacts. The umbrella document is the programmatic environmental impact statement (PEIS). Major Federal programs should have a document that integrates all complementary program activities. Subsequently, more localized PEISs can be developed, but again they consolidate many independent actions. Finally, the Environmental Impact Statement (EIS) or Environmental Assessment (EA) are then the appropriate working tool for individual or site-specific actions, under the umbrella of the PEIS.

The regulations also require the identification of mitigation measures. Just what is that? First, a definition is necessary. "Mitigation includes: a) Avoiding the impact altogether by not taking a certain action or parts of an action. b) Minimizing impacts by limiting the degree or magnitude of the action and its implementation. c) Rectifying the impact by repairing, rehabilitating or restoring the affected environment. d) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action. e) Compensating for the impact by replacing or providing substitute resources or environments."¹⁹ Now, the regulations for an EIS require "...appropriate mitigation measures not already included in the proposed action or alternatives."²⁰

¹⁸ 40 CFR Part 1508.28.

¹⁹ 40 CFR Part 1508.20.

²⁰ 40 CFR Part 1502.14 (f).

HOW ARE WE DOING IN IMPLEMENTING THE LAW?

Well, how far have we come, 20 years into the NEPA process? In its 21st Annual Report to the Congress, titled Environmental Quality, the Council on Environmental Quality notes the progress of the government in implementing NEPA. "Many of the same concerns, frustrations, and doubts that ignited the first explosion of environmental awareness more than 20 years ago persist today."²¹ Is the environment a major criteria in Federal decisions? Is the public a key part of the decision process? Is NEPA accepted by senior managers as a useful tool in decision making?

"I can think of no other initiative in our history that had such a broad outreach, that cut across so many functions of government, and that had such a fundamental impact on the way government does business...."²²

-- Russell Train, 1988

Continuing Problems

To find out just what those concerns, frustrations, and doubts were, I held interviews with professionals responsible for NEPA activities. I focused the discussions on the broad scope of the NEPA process.

To get the traditional program perspective, I met with DOE officials in the Office of Defense Programs and the Office of New Production Reactors. I also met with a U.S. Army officer formerly responsible for NEPA activities as part of the base closure at the Presidio in California. To get the policy perspective, I met with an official at the Council on Environmental Quality and various officials in the DOE Office of Environment, Safety, and Health.

²¹ Council on Environmental Quality, page 190.

²² Robert V. Bartlett, Policy Through Impact Assessment, page 2.

Finally, to get the perspective of the public role in NEPA, I met with an official of the Natural Resources Defense Council.

Surprising to me, the views on the broad issues are consistent. Most feel that the NEPA process is beneficial, is improving, and is worth the cost and time. Most feel that the level of activity is about right. Where there are differences of opinion on specific issues, they are more along the line of a "poTAYto versus poTAHto" interpretation of requirements. The major problems where there is less consensus fall into three broad areas.

Expanding Bureaucracy. It is interesting that the Congress never intended to establish a bureaucracy to support NEPA requirements. "The objectives of NEPA were to be achieved not through widespread government reorganization or through the creation of vast new bureaucracies to manage the environment..."²³ But that is what happened.

Outside of the Council on Environmental Quality, many Federal agencies established separate organizations with environmental professionals seeking to define, conduct, review, and monitor environmental activities. In many interviews, there was concern that NEPA created a cottage industry of environmental experts rather than improved the decision process.

The majority of the new bureaucracy conducts oversight functions. Oversight, in and of itself, is not bad. "At the same time, the politics of bureaucracy provides an environment in which the effectiveness of impact assessment can be tempered, subverted, and broken in the absence of adequate provisions for

²³ Ibid.

external accountability."²⁴

Oversight is necessary to assure program compliance with NEPA requirements. In the DOE, for example, the Assistant Secretary for Environment, Safety, and Health conducts internal oversight of NEPA performance by the Department's traditional program offices. But, the creation of this oversight group was not followed by an equal increase in people within the traditional programs to accomplish the line management responsibility to conduct NEPA activities. In fact, many of those people migrated from the traditional program offices to the new oversight organizations. And, they were not readily replaced. This shortage of staff in the traditional programs is key to a lack of ownership of the NEPA process.

"I am convinced that the Department's line organizations, which have the responsibility for preparation of NEPA documents, have not sufficiently incorporated the requirements of NEPA into the planning process for new projects at the various DOE sites."²⁵ Why? One reason is that, as with many other Congressional initiatives, NEPA was just another item on a long list of things to do. Priorities did not change. The underlying problem is that there just aren't enough people to do all the jobs now required by law, regulation, and internal policies.

One way to get the work done was to get someone else to do it. Oversight organizations were directing the effort, so all a manager had to do was fix the problems those oversight groups identified. But that is not how Congress

²⁴ Bartlett, page 4.

²⁵ Secretary of Energy Notice (SEN) 15-90.

intended NEPA to work. "I indicated that many of the Department's activities under the National Environmental Policy Act (NEPA) had been carried out in a decentralized, non-uniform and self-defeating manner."²⁶

Expanding Scope of the EIS Process. One measure of success for an expanding bureaucracy is to increase parochial requirements so others support your continued existence. Some suggest the scope of the NEPA process, as defined by the Council's regulations and implemented by some agencies, goes beyond the original intent of the Congress. An example is necessary.

One of the more controversial elements of the regulations is the identification of mitigation measures (40 CFR Part 1502.14). Mitigation includes "compensating for the impact by replacing or providing substitute resources or environments."²⁷ This is now a key activity in some agencies. The DOE now requires corrective actions and mitigation action plans for environmental impacts.

The original intent of the Congress, however, focused only on identifying environmental impacts, and considering alternatives of action. That is clear from reading Section 102, Paragraph C and the Committee reports. The law recognized there might be "irreversible and irretrievable commitments of resources..."²⁸ and that some actions might harm the environment. But there is no specific mention of mitigation in the law nor the Committee report.

²⁶ Ibid.

²⁷ 40 CFR Part 1508.20.

²⁸ The National Environmental Policy Act of 1969, Public Law 91-190.

Management Perceptions. "Over the years, there have been three general attitudes toward NEPA among DOE officials. The first and most troubling is one of downright contempt."²⁹ Certainly many of the current senior managers rose through the system as a reward for getting the production job done. There was little tolerance for activities that might require missing a production schedule. Many of those senior managers viewed the NEPA process as a way for others to delay programs or completion of projects. They saw NEPA as an expanding bureaucracy, creating new information needs, and encumbering their activities and challenging their decisions. The public had little input into the decision process when it came to national security issues. "...much of what we said was resisted, we were sometimes dismissed as extremists, and sadly, on occasion, our patriotism was questioned."³⁰

"The second attitude is not as hostile toward NEPA, but it nonetheless views the EIS process as an obstacle to be overcome rather than a useful decision making tool."³¹ Most of those interviewed still view NEPA as being a mechanical process, another check-off in the project approval process. "The purpose of the impact statement --to aid Federal officials and the public in making basic policy choices-- had been obscured by a blizzard of data, the compilation of which served little or no useful purpose..."³² "...(agencies) began preparing lengthy, nonanalytic documents that contributed little, if

²⁹ Dan W. Reicher, Testimony before the Subcommittee on Fisheries and Wildlife, Conservation and the Environment of the House Committee on Merchant Marine and Fisheries, February 6, 1990, page 5.

³⁰ Ibid., page 3.

³¹ Ibid., page 6.

³² Council on Environmental Quality, page 196.

anything, to either environmental quality objectives or to their primary missions."³³ Part of this concern reflects a desire to cover the waterfront of environmental issues, in effect, leaving no stone unturned. The belief is that this lessens the chances of litigation. But in doing that, the process becomes cumbersome and therefore self-defeating.

Evolution is a word to describe the progress of the NEPA process. In the early years of NEPA, proponents spent much time selling the process to skeptical Federal managers. Then, a shift occurred. Managers began to understand the process and meet the requirements. In fact, senior officials appear to like the deliberate decision process that NEPA fosters. In a press conference in December 1991, Secretary of Energy James D. Watkins stated that NEPA "allows time to provide better baseline for technical and site decisions. The EIS let me make the right decision on technology; let me look at other technologies..."³⁴ Now, we appear to be in an era where NEPA is an integral part of the decision making process. "The third attitude --shared by a growing group of DOE officials, including the Secretary-- sees value in the NEPA process."³⁵ There may now be a buy-in, where the NEPA process is inherent to most management thinking.

How can we measure whether there really is a buy-in? Statistics³⁶ included in the Council on Environmental Quality's annual report show the number of

³³ Ibid., page 194.

³⁴ Admiral James D. Watkins, Comments at press conference on Status of Nuclear Weapons Program, December 16, 1991.

³⁵ Reicher, page 7.

³⁶ Council on Environmental Quality, pages 233-234.

environmental documents increasing. But, litigation is declining. In the 1970s, litigation averaged nearly 137 cases per year. In the 1980s, that number averaged 87 cases per year. The report cites inadequate or no EISs as the most common complaint during both decades. Of interest, in 1989, only 57 litigation cases were filed; injunctions resulted in only 5 of those cases. Some believe, however, that part of the decline in litigation is due to fewer cases taken to court; litigants may prefer to settle out of court.

Other Concerns. There are other interesting twists to the perception and use of NEPA over the years. I did not study these in depth, but list them as interesting concerns for future research.

"...all too often it seems that the time DOE takes to prepare an EIS is inversely proportional to the Department's desire to undertake the proposed action."³⁷ Success in NEPA is often directly proportional to management's commitment to a project. One example is the effort to complete the EIS for the restart of the L-reactor at Savannah River. Once the decision was made to do the EIS, it took only 11 months to complete. Other environmental documents take upwards of three years to complete within the DOE.

Another twist suggests a reverse-NEPA practice. This use of the NEPA tool can forestall unwanted closure and dismantlement of certain facilities, such as the Shoreham reactor, or delay decisions that are too tough to make in the near term. Some suggest that the DOE's New Production Reactor program was close to being canceled when the public justification of the urgency for the project went away. But, rather than cancel the project, the DOE just folded

³⁷ Reicher, page 19.

the EIS effort into the context of the overall Reconfiguration PEIS, which is still over a year away from completion. The project is alive today.

Why do EISs cost so much? Across the government, an EIS ranges from \$250,000 to nearly \$40 million. In fairness, this range often results from honest differences in scope and technical complexity between programs or projects. In some cases, however, it may also reflect creative accounting and a "christmas tree" effect of loading front-end costs for technical design engineering in the name of environment. That may be a round about way to continue project development prior to project approval.

Finally, some suggest NEPA's goal to protect the environment is better served by other environmental laws. Today, there are 27 major environmental laws, of which NEPA is but one. The other 26 laws on the books protect the environment far more effectively than NEPA ever could because they have prescriptive standards and financial penalties for non-compliance. Some believe NEPA may not be a relevant policy tool anymore, just another bureaucratic process with little value added in improving the environment. A counter view is that NEPA is a "look before you leap" statute, designed to determine whether you even need the project in the first place. This serves a valuable function by itself. Once the project is approved, then the prescriptive standards of the other laws assure protection of the environment.

WHAT, IF ANYTHING, NEEDS TO CHANGE?

What the interviews highlight is that the original intent of the Congress, as defined in NEPA, seems to have been lost over the years. Many of those I talked to expressed concern about the expanding bureaucracy and the ability to get the job done effectively and efficiently. There was particular concern

about controlling the scope of mitigation measures. But, overall, those interviewed view NEPA as worthwhile. Is there a real problem that needs fixing?

Some problems noted above are a *fait accompli*. Other problems, with some minor tuning, could improve the process, both in operation and in management buy-in. What needs to change to make NEPA work as Congress intended?

Expanding Bureaucracy. NEPA is only one of many Congressional or administrative requirements laid on senior managers. And a fact-of-life is that there are no more people to devote to new problems or initiatives; it is a zero-sum game. This dilutes the effectiveness of the staff on board to do the work right. NEPA is a victim of this dilution. As noted earlier, NEPA expertise migrated to the new oversight organizations, leaving the traditional programs with fewer people to do all the work. Subsequently, those new oversight organizations evolved into "gotcha" operations rather than assisting the traditional programs and furthering the overriding goals of the agency to consider the environment. Recommendation: There needs to be better balance between oversight and line management responsibility. NEPA staff need to be put where the program decisions are made, in the traditional programs. If that is unacceptable to the bureaucracy, then agencies should develop a matrix operation to conduct NEPA activities. A "program-team" from the oversight offices would work hand-in-hand with the traditional programs to further the goals of NEPA in the most effective and efficient manner. The risk of compromising the independence of oversight is not as great as the benefit to the agency from maximizing the limited resources devoted to NEPA to do the job right, early in the planning process.

Expanding Scope of the EIS Process. One trend that goes beyond the original intent of the Congress is the requirement for mitigation of environmental impacts. The potential cost and time to correct environmental impacts is a potential major liability for agencies in the future. Without a commitment to risk analysis or cost/benefit analysis, these mitigation measures and corrective action plans will require a significant amount of resources.

Recommendation: Develop a structured process to develop standards for when mitigation action plans are really necessary and why. A disciplined process that balances risk and cost is preferable, rather than a fix-it-at-all-costs mentality that reflects early efforts at mitigation.

Management Perceptions. "Every line manager and employee must understand that, as with all other environmental and safety requirements, compliance with NEPA should be entirely consistent with efficiency in achieving mission goals if NEPA requirements are considered early in the planning process."³⁸ In 1991, DOE sent to Congress a study to reconfigure its nuclear weapons complex. One of the major milestones is to complete a programmatic environmental impact statement to analyze alternative configurations of the Complex.³⁹ That PEIS "...will serve as an effective planning and decision making tool by providing DOE and the public with information on the environmental consequences of possible reconfiguration alternatives before potential options have been foreclosed or irrevocable project-level commitment of resources have been made."⁴⁰ While some like a cookbook approach to NEPA considerations,

³⁸ Secretary of Energy Notice (SEN) 15-90.

³⁹ U.S. Department of Energy, Nuclear Weapons Complex Reconfiguration Study.

⁴⁰ Ibid., page 5.

Congress intended the environment to be a parallel consideration, along with cost, technical feasibility, schedule, and performance. Managers should automatically ask what impacts are there to the environment and what alternatives are there to proposed actions. Recommendation: Umbrella PEISs should be established for every major program in government. Then, any proposal can be considered under that umbrella. This places discipline in the planning process. But the discipline will only permeate the organization through effective leadership. The commitment to NEPA principles must come from the highest levels of each agency and it must be clear and concise.

CONCLUSION

The NEPA process continues to evolve. But, it still needs leadership to work more effectively. The common thread to the acceptance or rejection of NEPA principles is leadership. Leadership drives the bureaucracy and management perception.

"I learned...that the fulfillment of the mission of our national defense and the protection of the environment were mutually compatible objectives, and that to think one must be sacrificed to achieve the other is wrong. It is my strongly held personal conviction that DOE's mission can be considered as being successfully completed only if it is carried out safely and without insult to public health or environment."⁴¹

-- Admiral James D. Watkins, 1989

An example of such leadership is reflected in the directives from Admiral Watkins. "I intend to hold each Secretarial Officer whose line organization is responsible for preparation of NEPA analyses personally accountable for the

⁴¹ Admiral James D. Watkins, Confirmation Hearing for Secretary of Energy before the Senate Committee on Energy and Natural Resources. February 22, 1989.

quality and sufficiency of those analyses."⁴² This clearly states what Admiral Watkins expects from his senior managers. Ownership is a function of what the manager believes the boss wants; clear and concise guidance leaves little to the imagination.

The philosophy and culture envisioned by Congress in 1969 is possible to attain. There is a new generation of managers that will ask those environmental and other questions before making decisions. As that generation rises to senior management positions in the coming years, NEPA considerations should be implicit in all decisions.

For one who was not proficient in the school of NEPA, this research project showed that the system is working, that it is making a difference, and that there are some small changes that could be made to make the process more efficient, effective, and natural.

When I began this research project, I had some going in assumptions about the cost, effectiveness, and utility of the NEPA process. As I finish this project, many of those assumptions were wrong. That is a positive outcome of this project. The final conclusion I draw is that NEPA should be thought of just as total quality management, ethics, and any other responsible common sense practice. It should be mindset, an ingrained response. One should automatically ask these questions: what does this do to the environment and are there any reasonable alternatives?

-END-

⁴² Secretary of Energy Notice (SEN) 15-90.

INTERVIEWS

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ACRONYMS

CFR	Code of Federal Regulations
DOE	Department of Energy
EA	Environmental Assessment
EIS	Environmental Impact Statement
NEPA	National Environmental Policy Act of 1969
PEIS	Programmatic Environmental Impact Statement
SEN	Secretary of Energy Notice

MAJOR ENVIRONMENTAL STATUTES

1963 Clean Air Act
1967 National Historic Preservation Act
1970 National Environmental Policy Act
1970 Occupational Safety and Health Act
1970 Clean Air Act, Amendments
1972 Noise Control Act
1972 Federal Water Pollution Control Act
1973 Endangered Species Act
1974 Hazardous Materials Transportation Act
1974 Safe Drinking Water Act
1976 Toxic Substances Control Act
1977 Resources Conservation and Recovery Act
1978 Clean Air Act, Amendments
1978 Clean Water Act
1979 Uranium Mill Tailings Radiation Control Act
1980 Archaeological Resources Protection Act
1981 Resources Conservation and Recovery Act, Amendments
1981 Safe Drinking Water Act
1982 Nuclear Waste Policy Act
1984 Resource Conservation and Recovery Act, Amendments
1986 Emergency Planning and Community Right to Know Act
1986 Safe Drinking Water Act, Amendments
1986 Comprehensive Environmental Response, Compensation, and Liability Act
1986 Low Level Radioactive Waste Policy Act
1987 Clean Water Act, Amendments
1987 Nuclear Waste Policy Act, Amendments
1989 Clean Air Act, Amendments